

Overview of Environmental and Cultural Resources

Drainage Patterns

Significant stream corridors are present within the Arcola Area/Route 50 corridor, including several tributaries of Broad Run (Lenah Run and the South Fork of Broad Run) and Bull Run (Elklick Run). The study area is divided into two different watersheds. The portion that is generally located north and west of the Washington Dulles International Airport and the South Riding community is located within the Broad Run watershed, which ultimately drains into the Potomac River. The remainder of the area in the east is located in the Bull Run watershed, one of the two principal sub-basins that form the Occoquan Watershed and ultimately drains into the Occoquan Reservoir. The area contains both major and minor floodplain and steep slopes associated with these stream corridors.

Forest Cover

Approximately 40% of the study area remains forested. In general, the forest cover in this area consists of first successional forests, mature, mixed-hardwood communities, and riparian forests. Between 80 and 85% of the forest cover is deciduous, with the remainder evergreen (e.g., cedars and pines). Given the importance of preserving surface water quality, maintaining the existing riparian buffer adjacent to creeks and other drainageways is of high priority.

Soils

Concentrations of diabase rock are present within the Route 50 corridor which are actively quarried within Segment 1 (the Chantilly Crushed Stone quarry) as well as in other parts of the County. Diabase rock is a hard, brittle rock used for the construction of roads and building foundations.

Heritage Resources

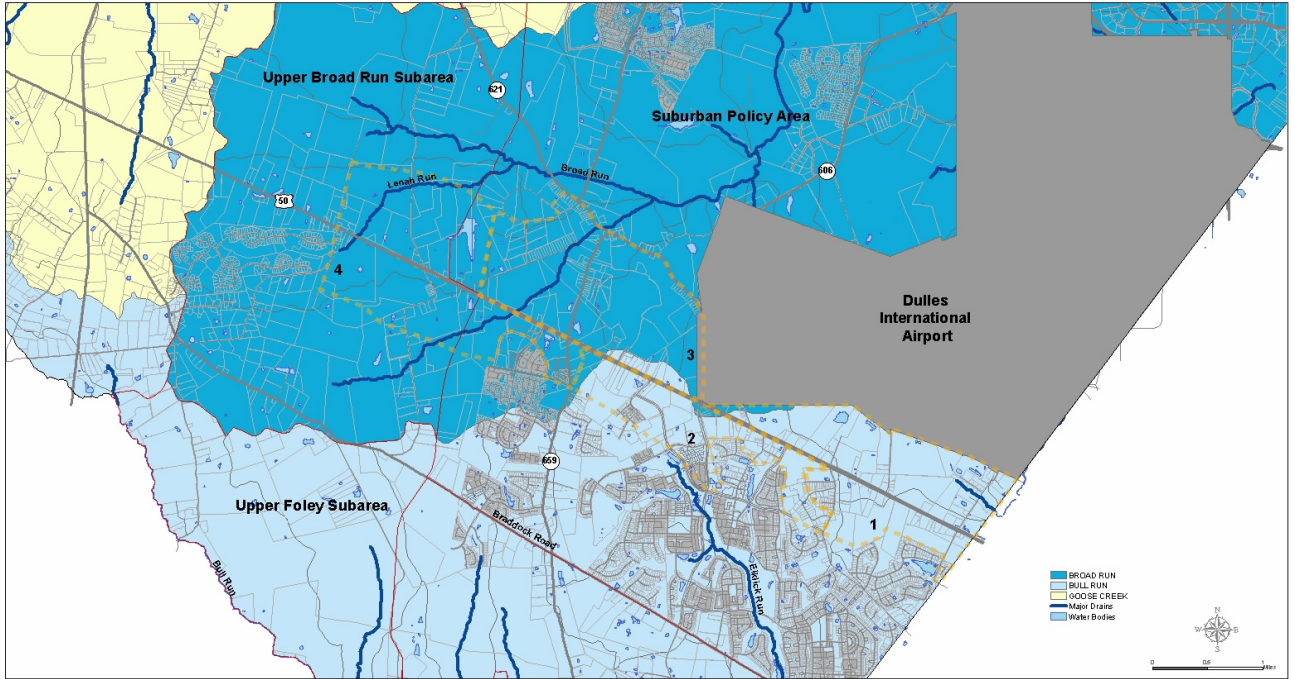
There are approximately 68 surveyed historic structures and 35 identified archaeological sites within the study area. In addition, Evergreen Mill Road is a historic roadway and portions were once part of the Old Carolina Road, perhaps the most well-used Colonial, north-south right of way through the County. The western portion of the Route 50 corridor is also located within the Mosby Heritage Area.

Airport Noise Contours

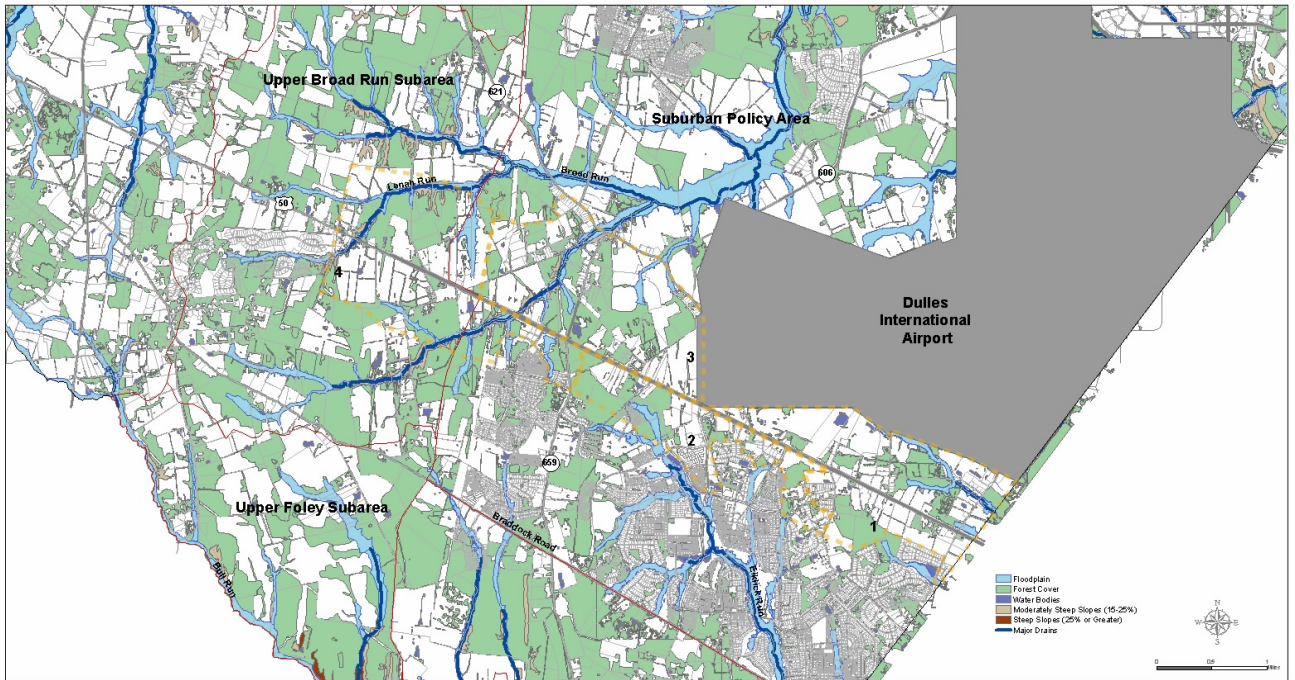
All the segments are affected by aircraft noise contours of the Washington Dulles International Airport, including the Ldn 65, Ldn 60, and Ldn 60 1-mile buffer noise contours. Residential dwellings are not permitted within the Ldn 65 noise contour. Residential dwellings are permitted within the Ldn 60 noise contour with full disclosure, acoustical treatments, and aviation easements and within the Ldn 60 1-mile noise buffer with full disclosure.

NOTE: For a detailed discussion and additional maps, please see the Existing Conditions Issue Paper, prepared February 27, 2006.

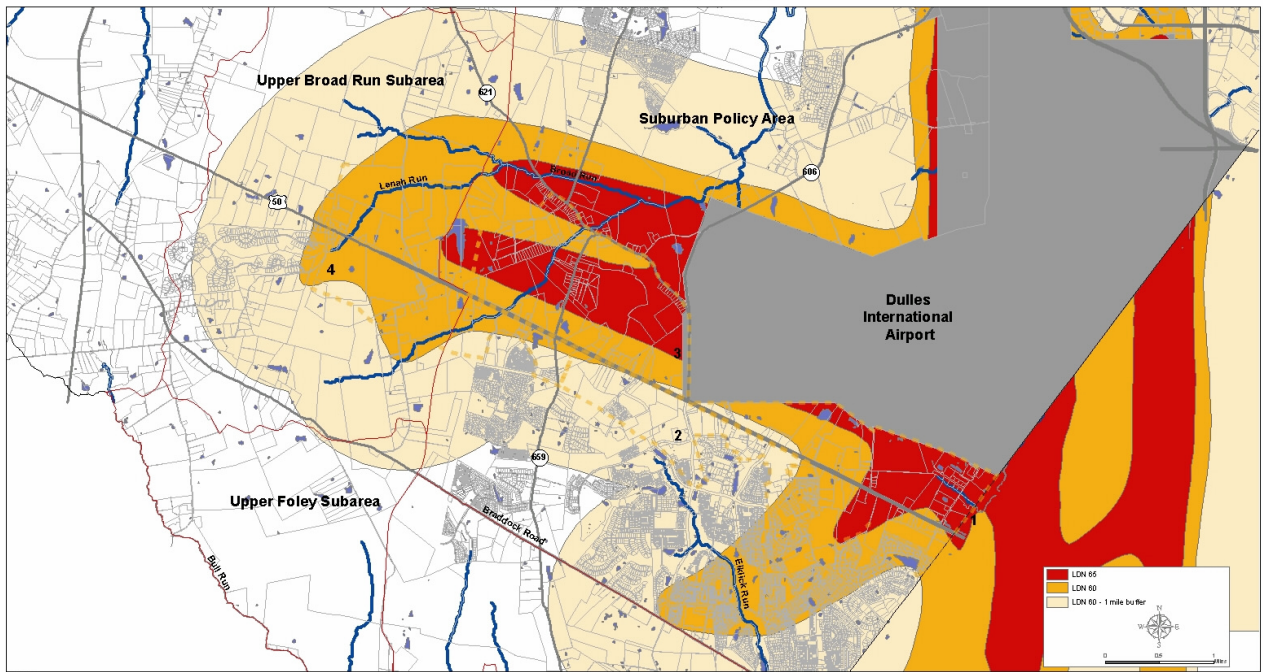
Major and Sub-Watersheds



Green Infrastructure



Airport Noise Contours



Historic and Archaeological Resources

